



# City of Tualatin

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## CITY ENGINEER'S REVIEW, FINDINGS, AND DECISION FOR AR-18-0002 (API EXPANSION)

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## I. RECOMMENDATION

Based on the findings made herein, the City Engineer approves AR-18-0002 (API Expansion), subject to the below conditions. Unless otherwise noted, requirements indicated below for plans, documents, and permits will be submitted to the Engineering Division:

### **A. PRIOR TO ISSUANCE OF EROSION CONTROL, PUBLIC WORKS, AND WATER QUALITY PERMITS:**

- PFR-1 Submit final sanitary sewer plans that show location of the lines, grade, materials, and other details including a clean out at the right-of-way.
- PFR-2 Submit final water system plans that show location of the water lines, grade, materials, and other details.
- PFR-3 Obtain a City of Tualatin erosion control permit in accordance with code section TMC 3-5-060.
- PFR-4 Submit plans for a 1200CN NPDES Erosion Control Permit.
- PFR-5 Submit final stormwater calculations and plans.
- PFR-6 Pay a fee in lieu equal to \$1/square foot of new, untreated impervious area for SW Herman Road improvements per Clean Water Services Rates and Charges.
- PFR-7 Submit a Flood Hazard Area Development Permit and stamped plans showing the floodplain with no-rise in elevation.
- PFR-8 Prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.
- PFR-9 Prove that the existing sidewalks for SW 125<sup>th</sup> Court are in conformance with Public Works Construction Code/ADA/PROWAG, or show the sections to be reconstructed. If the west ramp at the intersection of SW 125<sup>th</sup> Court and SW Herman Road is to be improved, the receiving east ramp will be improved to match.
- PFR-10 Submit a plan sheet that shows adjacent to this site sufficient dedication of right-of-way of SW Herman Road to total 62.5 feet from Southern Pacific Railroad right-of-way with construction to include a 6-foot bike lane, curb and gutter, a 6-foot sidewalk along the SW Herman Road site frontage. Subject to final approval by the City Engineer, the sidewalk may meander around existing poles and to save trees, and variable width planter strip with street trees and street lights.
- PFR-11 If it is necessary to meander the required sidewalk outside of the SW Herman Road right-of-way in order to preserve adjacent trees, provide a dedicated easement over the entire width of the sidewalk. Show this easement on the same plan set as PFR-10.
- PFR-12 Submit plans that are sufficient to obtain a Stormwater Connection Permit Authorization Letter that complies with the submitted Service Provider Letter conditions: 1) Plant the proposed Vegetated Corridor to Clean Water Services standards as approved by CWS file number 18-000889 and 2) Record an easement over the Vegetated Corridor which conveys storm and surface water management to Clean Water Services, and prevents the owner of the

Vegetated Corridor from activities and uses inconsistent with the purpose of the corridor.

- PFR-13 Submit plans that minimize the impact of stormwater from the development to adjacent properties.
- PFR-14 Submit a plan sheet that includes all City Engineer and Planning Division conditions of approval. Include Clean Water Services' Service Provider Letter.
- PFR-15 Submit PDFs of final site and permit plans.

**B. PRIOR TO ISSUANCE OF A BUILDING PERMIT:**

- PFR-16 Obtain an Erosion Control, Public Works, and Water Quality Permit from the City of Tualatin.
- PFR-17 Complete all the public improvements, shown on submitted plans and corrected by conditions of approval, and have them accepted by the City or provide financial assurance.

**C. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY:**

- PFR-18 Construct all private and public improvements shown on final approved plans.
- PFR-19 Dedicate right-of-way adjacent to this site for SW Herman Road to total 62.5 feet from Southern Pacific Railroad right-of-way.
- PFR-20 Record a public pedestrian access easement for any area of sidewalk located outside of the SW Herman Road right-of-way.
- PFR-21 Record a 6-foot wide public utility easement behind the final right-of-way line adjacent to both SW Herman Road and SW 125<sup>th</sup> Court.

**II. APPEAL**

An appeal of this decision must be received by the Engineering Division within the 14-day appeal period ending on **January 2, 2019 at 5 PM**. Issues must have been described with adequate clarity and detail with identification of the associated Tualatin Municipal or Development Code section to afford the City Council an opportunity to respond to the issue. An appeal must be submitted on the form provided by the City, as detailed in TDC 36.161, accompanied by the applicable appeal fee, and signed by the appellant.

Sincerely,



Tony Doran, EIT  
Engineering Associate

### **III. STANDARDS AND APPLICABLE CRITERIA**

Tualatin Municipal Code (TMC)  
Title 03: Utilities and Water Quality  
Title 04: Building

Tualatin Development Code (TDC)  
Chapter 70: Floodplain District  
Chapter 73: Community Design Standards  
Chapter 74: Public Improvement Requirements

### **IV. CONCLUSIONS**

#### **A. TMC TITLE 03: UTILITIES AND WATER QUALITY**

##### **I. TMC CHAPTER 03-02: SEWER REGULATIONS; RATES**

###### **1. TMC 3-2-020 APPLICATION, PERMIT AND INSPECTION PROCEDURE.**

(1) No person shall connect to any part of the sanitary sewer system without first making an application and securing a permit from the City for such connection, nor may any person substantially increase the flow, or alter the character of sewage, without first obtaining an additional permit and paying such charges therefore as may be fixed by the City, including such charges as inspection charges, connection charges and monthly service charges.

#### **FINDINGS:**

The sanitary sewer for the building expansion will be provided via the existing service. No new public connections are proposed and none are required.

This criterion is satisfied.

##### **II. TMC CHAPTER 03-03: WATER SERVICE**

###### **1. TMC 3-3-040 SEPARATE SERVICES REQUIRED.**

(1) Except as authorized by the City Engineer, a separate service and meter to supply regular water service or fire protection service shall be required for each building, residential unit or structure served. For the purposes of this section, trailer parks and multi-family residences of more than four dwelling units shall constitute a single unit unless the City Engineer determines that separate services are required.

- (2) For nonresidential uses, separate meters shall be provided for each structure. Separate meters shall also be provided to each buildable lot or parcel on which water service is or will be provided.**

**FINDING:**

Domestic and irrigation water services for the building expansion will be provided via existing service. No new public connections or meters are proposed.

This criterion is satisfied.

**2. TMC 3-3-110 CONSTRUCTION STANDARDS.**

All water line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, whenever a property owner extends a water line, which upon completion, is intended to be dedicated to the City as part of the public water system, said extension shall be carried to the opposite property line or to such other point as determined by the City Engineer. Water line size shall be determined by the City Engineer in accordance with the City's Development Code or implementing ordinances and the Public Works Construction Code.

**FINDING:**

The domestic, irrigation and fire water services are currently in place and no public work construction is proposed.

This criterion is satisfied.

**3. TMC 3-3-120 BACKFLOW PREVENTION DEVICES AND CROSS CONNECTIONS.**

- (1) Except where this ordinance provides more stringent requirements, the definitions, standards, requirements and regulations set forth in the Oregon Administrative Rules pertaining to public water supply systems and specifically OAR 333 Division 61 in effect on the date this ordinance becomes effective are hereby adopted and incorporated by reference.**
- (2) The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist:**
- (a) Those circumstances identified in regulations adopted under subsection (1) of this section;**
  - (b) Where there is a fire protection service, an irrigation service or a nonresidential service connection which is two inches (2") or larger in size;**
  - (c) Where the potable water supply provided inside a structure is 32 feet or more, higher than the elevation of the water main at the point of service connection;**

**FINDING:**

Domestic and irrigation water services for the building will be provided via existing service. No new meters or back flow devices are proposed.

This criterion is satisfied.

**(4) Except as otherwise provided in this subsection, all irrigation systems shall be installed with a double check valve assembly. Irrigation system backflow prevention device assemblies installed before the effective date of this ordinance, which were approved at the time they were installed but are not on the current list of approved device assemblies maintained by the Oregon State Health Division, shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard, are tested at least annually, and perform satisfactorily. When devices of this type are moved, or require more than minimum maintenance, they shall be replaced by device assemblies which are on the Health Division list of approved device assemblies.**

**FINDING:**

Domestic and irrigation water services for the building will be provided via existing service. No new meters or back flow devices are proposed.

This criterion is satisfied.

**4. TMC 3-3-130 CONTROL VALVES.**

**The customer shall install a suitable valve, as close to the meter location as practical, the operation of which will control the entire water supply from the service. The operation by the customer of the curb stop in the meter box is prohibited.**

**FINDING:**

The project will use existing services and the existing valve. No new services or valves are proposed.

This criterion is satisfied.

**III. TMC 3-5 ADDITIONAL SURFACE WATER MANAGEMENT STANDARDS**

**1. TMC 3-5-010 POLICY.**

**It is the policy of the City to require temporary and permanent measures for all construction projects to lessen the adverse effects of construction on the environment. The contractor shall properly install, operate and maintain both temporary and permanent works as provided in this chapter or in an approved plan, to protect the environment during the term of the project. In addition, these erosion control rules apply to all properties within the City, regardless of whether**



**that property is involved in a construction or development activity. Nothing in this chapter shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority...**

## **2. TMC 3-5-050 EROSION CONTROL PERMITS.**

**(1) Except as noted in subsection (3) of this section, no person shall cause any change to improved or unimproved real property that causes, will cause, or is likely to cause a temporary or permanent increase in the rate of soil erosion from the site without first obtaining a permit from the City and paying prescribed fees. Such changes to land shall include, but are not limited to, grading, excavating, filling, working of land, or stripping of soil or vegetation from land.**

### **FINDING:**

This construction of this building expansion will not cause any increase of soil erosion from the site.

The area disturbed is between 1 and 5 acres. The applicant shall obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

This criterion is satisfied with conditions of approval PFR-3, PFR-4, and PFR-16.

**(2) No construction, land development, grading, excavation, fill, or the clearing of land is allowed until the City has issued an Erosion Control Permit covering such work, or the City has determined that no such permit is required. No public agency or body shall undertake any public works project without first obtaining from the City an Erosion Control Permit covering such work, or receiving a determination from the City that none is required.**

### **FINDING:**

The area disturbed is between 1 and 5 acres. The applicant shall obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

This criterion is satisfied with conditions of approval PFR-3, PFR-4, and PFR-16.

## **3. TMC 3-5-060 PERMIT PROCESS.**

**(1) Applications for an Erosion Control Permit. Application for an Erosion Control Permit shall include an Erosion Control Plan which contains methods and interim facilities to be constructed or used concurrently and to be operated during construction to control erosion. The plan shall include either:**

**(a) A site specific plan outlining the protection techniques to control soil erosion and sediment transport from the site to less than one ton per acre per**

year as calculated using the Soil Conservation Service Universal Soil Loss Equation or other equivalent method approved by the City Engineer, or

(b) Techniques and methods contained and prescribed in the Soil Erosion Control Matrix and Methods, outlined in TMC 3-5.190 or the Erosion Control Plans - Technical Guidance Handbook, City of Portland and Unified Sewerage Agency, January, 1991.

(2) Site Plan. A site specific plan, pre-pared by an Oregon registered professional engineer, shall be required when the site meets any of the following criteria:

- (a) greater than five acres;
- (b) greater than one acre and has slopes greater than 20 percent;
- (c) contains or is within 100 feet of a City-identified wetland or a waterway identified on FEMA floodplain maps; or
- (d) greater than one acre and contains highly erodible soils.

**FINDING:**

An Erosion Control plan, prepared by a registered professional engineer, and compliant with the requirements described in this section, is included in this submittal package.

The required EC permit, will be applied for meeting the specific requirements for submitting such. If disturbance area exceeds 1 acres a 1200 CN permit will be applied for.

The area disturbed is between 1 and 5 acres. The applicant shall obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

This criterion is satisfied with conditions of approval PFR-3, PFR-4, and PFR-16.

**4. TMC 3-5-200 DOWNSTREAM PROTECTION REQUIREMENT.**

Each new development is responsible for mitigating the impacts of that development upon the public storm water quantity system. The development may satisfy this requirement through the use of any of the following techniques, subject to the limitations and requirements in TMC 3-5-210:

(1) Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this title;

**FINDING:**

The project proposes on site detention using large diameter piping with outflow limited by an orifice installed within a control manhole. Sizing is detailed in the submitted drainage analysis. A downstream analysis was prepared by AAI, dated August 1, 2018, and is described within the Stormwater Report included in this application. The

Stormwater Report determined that there is not a downstream deficiency for the proposed plan.

This criterion is satisfied with conditions of approval PFR-5 and PFR-16.

#### **5. TMC 3-5-210 REVIEW OF DOWNSTREAM SYSTEM.**

**For new development other than the construction of a single family house or duplex, plans shall document review by the design engineer of the downstream capacity of any existing storm drainage facilities impacted by the proposed development. That review shall extend downstream to a point where the impacts to the water surface elevation from the development will be insignificant, or to a point where the conveyance system has adequate capacity, as determined by the City Engineer. To determine the point at which the downstream impacts are insignificant or the drainage system has adequate capacity, the design engineer shall submit an analysis using the following guidelines:**

- (1) evaluate the downstream drainage system for at least  $\frac{1}{4}$  mile;**
- (2) evaluate the downstream drainage system to a point at which the runoff from the development in a build out condition is less than 10 percent of the total runoff of the basin in its current development status. Developments in the basin that have been approved may be considered in place and their conditions of approval to exist if the work has started on those projects;**
- (3) evaluate the downstream drainage system throughout the following range of storms: 2, 5, 10, 25 year;**
- (4) The City Engineer may modify items 1, 2, 3 to require additional information to determine the impacts of the development or to delete the provision of unnecessary information.**

**If the increase in surface waters leaving a development will cause or contribute to damage from flooding, then the identified capacity deficiency shall be corrected prior to development or the development must construct onsite detention. To determine if the runoff from the development will cause or contribute to damage from flooding the City Engineer will consider the following factors:**

- (1) The potential for or extent of flooding or other adverse impacts from the runoff of the development on downstream properties;**
- (2) The potential for or extent of possibility of inverse condemnation claims;**
- (3) Incremental impacts of runoff from the subject and other developments in the basin; and**
- (4) Other factors that may be relevant to the particular situation.**

**The purpose of the City Engineer's review is to protect the City and its inhabitants from the impacts or damage caused by runoff from development while recognizing all appropriate limitations on exactions from the development**

#### **FINDING:**

The downstream drainage system for the area was evaluated as required and is discussed in the Stormwater Report included with this submittal. This site will have storm drain facilities detaining runoff through the 25 year event. The Stormwater Report determined that there is not a downstream deficiency for the proposed plan.

This criterion is satisfied with conditions of approval PFR-5 and PFR-16.

**6. TMC 3-5-220 CRITERIA FOR REQUIRING ON-SITE  
DETENTION TO BE CONSTRUCTED.**

**The City shall determine whether the onsite facility shall be constructed. If the onsite facility is constructed, the development shall be eligible for a credit against Storm and Surface Water System Development Charges, as provided in City ordinance. On-site facilities shall be constructed when any of the following conditions exist:**

- (1) There is an identified downstream deficiency, as defined in TMC 3-5-210, and detention rather than conveyance system enlargement is determined to be the more effective solution...**
- (2) There is an identified regional detention site within the boundary of the development.**
- (3) There is a site within the boundary of the development which would qualify as a regional detention site under criteria or capital plan adopted by the Unified Sewerage Agency.**
- (4) The site is located in the Hedges Creek Subbasin as identified in the Tualatin Drainage Plan and surface water runoff from the site flows directly or indirectly into the Wetland Protected Area (WPA) as defined in TDC 71.020. Properties located within the Wetland Protection District as described in TDC 71.010, or within the portion of the subbasin east of SW Tualatin Road are excepted from the on-site detention facility requirement.**

**FINDING:**

The project is within an area identified as requiring detention up to the 25-year storm. The downstream drainage system for the area was evaluated as required and is discussed in the Stormwater Report included with this submittal. This site will have storm drain facilities detaining runoff through the 25 year event. The Stormwater Report determined that there is not a downstream deficiency for the proposed plan.

This criterion is satisfied with conditions of approval PFR-5 and PFR-16.

**7. 3-5-230 ON-SITE DETENTION DESIGN CRITERIA.**

- (1) Unless designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity onsite detention facilities shall be designed to capture run-off so the run-off rates from the site after development do not exceed predevelopment conditions, based upon a 25-year, 24-hour return storm.**
- (2) When designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity on-site detention facilities shall be designed such that the peak runoff rates will not exceed predevelopment rates for the 2 through 100 year storms, as required by the determined downstream deficiency.**

**(3) Construction of on-site detention shall not be allowed as an option if such a detention facility would have an adverse effect upon receiving waters in the basin or subbasin in the event of flooding, or would increase the likelihood or severity of flooding problems downstream of the site.**

**FINDING:**

The project is within an area identified as requiring detention up to the 25-year storm. The downstream drainage system for the area was evaluated as required and is discussed in the Stormwater Report included with this submittal. This site will have storm drain facilities detaining runoff through the 25 year event. The Stormwater Report determined that there is not a downstream deficiency for the proposed plan.

This criterion is satisfied with conditions of approval PFR-5 and PFR-16.

**8. 3-5-240 ON-SITE DETENTION DESIGN METHOD.**

- (1) The procedure for determining the detention quantities is set forth in Section 4.4 Retention/Detention Facility Analysis and Design, King County, Washington, Surface Water Design Manual, January 1990, except subchapters 4.4.5 Tanks, 4.4.6 Vaults and Figure 4.4.4G Permanent Surface Water Control Pond Sign. This reference shall be used for procedure only. The design criteria shall be as noted herein. Engineers desiring to utilize a procedure other than that set forth herein shall obtain City approval prior to submitting calculations utilizing the proposed procedure.**
- (2) For single family and duplex residential subdivisions, stormwater quantity detention facilities shall be sized for the impervious areas to be created by the subdivision, including all residences on individual lots at a rate of 2640 square feet of impervious surface area per dwelling unit, plus all roads which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Such facilities shall be constructed as a part of the subdivision public improvements. Construction of a single family or duplex residence on an existing lot of record is not required to construct stormwater quantity detention facilities.**
- (3) All developments other than single family and duplex, whether residential, multi-family, commercial, industrial, or other uses, the sizing of stormwater quantity detention facilities shall be based on the impervious area to be created by the development, including structures and all roads and impervious areas which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Impervious surfaces shall be determined based upon building permits, construction plans, site visits or other appropriate methods deemed reliable by City.**

**FINDING:**

The project is within an area identified as requiring detention up to the 25-year storm. The downstream drainage system for the area was evaluated as required and is discussed in the Stormwater Report included with this submittal. This site will have

storm drain facilities detaining runoff through the 25 year event. The Stormwater Report determined that there is not a downstream deficiency for the proposed plan.

This criterion is satisfied with conditions of approval PFR-5 and PFR-16.

## **9. TMC 3-5-250 FLOODPLAIN DESIGN STANDARDS.**

### **(1) Balanced Cut and Fill Standard.**

All fill placed in a floodplain shall be balanced with an equal amount of removal of soil material. No net fill in any floodplain is allowed with two exceptions:

- (a) When an engineering study has been conducted and approved by the City showing that the increase in water surface elevation resulting from the fill will not cause or contribute to significant damage from flooding to existing buildings or dwellings on properties upstream and downstream;**
- (b) When an area has received special protection from floodplain improvement projects which either lower the floodplain, or otherwise protect affected properties, are approved by the City, where the exceptions comply with adopted master plans, if any, and where all required permits and approvals have been obtained in compliance with other local, state, and federal laws regarding fill in floodplains, including FEMA rules.**

### **(2) Excavation Restricted.**

Large areas may not be excavated in order to gain a small amount of fill in a floodplain. Excavation areas shall not exceed the fill areas by more than 50 percent of the square footage, unless approved by the City.

### **(3) Excavation and Fill Volume Calculation.**

Any excavation dug below the winter "low water" elevation shall not count towards compensating for fill, since these areas would be full of water in the winter, and not available to hold storm water following a rain. Winter "low water" elevation is defined as the water surface elevation during the winter when it has not rained for at least three days, and the flows resulting from storms have receded. This elevation may be determined from records, studies or field observation. Any fill placed above the 100 year floodplain will not count towards the fill volume.

### **(4) Excavation Grade Design Standard.**

The excavated area must be designed to drain if it is an area identified to be dry in the summer; for example, if it is to be used for a park, or if it is to be mowed in the summer. Excavated areas identified as to remain wet in the summer, such as a constructed wetland, shall be designed not to drain. For areas that are to drain, the lowest elevation should be at least six inches above the winter "low water" elevation, and sloped at a minimum of two percent towards the drainage way. One percent slopes will be allowed in small areas.

### **(5) Excavation Location.**

Excavation to balance a fill does not need to be on the same property as the fill, but shall be in the same drainage basin, within points of constriction on the conveyance system, if any, as near as practical to the fill site, and shall be constructed as a part of the same development project which placed the fill.

**FINDING:**

A Flood Plain Memorandum was submitted by the project Oregon Registered Professional Civil Engineer, Craig Harris, AAI Engineering. This memo summarizes that the proposed construction will have no effect on the surrounding properties or the storage volume of the larger drainage basin.

This criterion is satisfied with conditions of approval PFR-7.

**IV. TMC 3-5 PERMANENT ON-SITE WATER QUALITY FACILITIES**

**1. TMC 3-5-280 PLACEMENT OF WATER QUALITY FACILITIES.**

**Title III specifies that certain properties shall install water quality facilities for the purpose of removing phosphorous. No such water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action, approved by the City, is constructed to replace the area used for the water quality facility.**

**FINDING:**

The site's proposed water quality facility is not located in wetlands or associated buffers.

This criterion is met.

**2. TMC 3-5-290 PURPOSE OF TITLE.**

**The purpose of this title is to require new development and other activities which create impervious surfaces to construct or fund on-site or off-site permanent water quality facilities to reduce the amount of phosphorous entering the storm and surface water system.**

**3. TMC 3-5-300 APPLICATION OF TITLE.**

**Title III of this Chapter shall apply to all activities which create new or additional impervious surfaces, except as provided in TMC 3-5.310.**

**FINDING:**

The site's proposed water quality facility is designed in conformance to Clean Water Services Resolution and Order 07-20.

This criterion is met.

#### **4. TMC 3-5-310 EXCEPTIONS.**

**(1) Those developments with application dates prior to July 1, 1990, are exempt from the requirements of Title III.**

**The application date shall be defined as the date on which a complete application for development approval is accepted by the City in accordance with City regulations.**

**(2) Construction of one and two family (duplex) dwellings are exempt from the requirements of Title III.**

**(3) Sewer lines, water lines, utilities or other land development that will not directly increase the amount of storm water run-off or pollution leaving the site once construction has been completed and the site is either restored to or not altered from its approximate original condition are exempt from the requirements of Title III.**

#### **5. TMC 3-5-320 DEFINITIONS.**

**(1) "Stormwater Quality Control Facility" refers to any structure or drainage way that is designed, constructed and maintained to collect and filter, retain, or detain surface water run-off during and after a storm event for the purpose of water quality improvement. It may also include, but is not limited to, existing features such as constructed wetlands, water quality swales, low impact development approaches ("LIDA"), and ponds which are maintained as stormwater quality control facilities.**

**(2) "Low impact development approaches" or "LIDA: means stormwater facilities constructed utilizing low impact development approaches used to temporarily store, route or filter run-off for the purpose of improving water quality. Examples include; but are not limited to, Porous Pavement, Green Roofs, Infiltration Planters/Rain Gardens, Flow-Through Planters, LIDA Swales, Vegetated Filter Strips, Vegetated Swales, Extended Dry Basins, Constructed Water Quality Wetland, Conveyance and Stormwater Art, and Planting Design and Habitats.**

**(3) "Water Quality Swale" means a vegetated natural depression, wide shallow ditch, or constructed facility used to temporarily store, route or filter run-off for the purpose of improving water quality.**

**(4) "Existing Wetlands" means those areas identified and delineated as set forth in the Federal Manual for Identifying the Delineating Jurisdictional Wetlands, January, 1989, or as amended, by a qualified wetlands specialist.**

**(5) "Created Wetlands" means those wetlands developed in an area previously identified as a non-wetland to replace, or mitigate wetland destruction or displacement.**



**(6) "Constructed Wetlands"** means those wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from existing or created wetlands. This separation shall preclude a free and open connection to such other wetlands.

**6. TMC 3-5-330 PERMIT REQUIRED.**

**Except as provided in TMC 3-5-310, no person shall cause any change to improved or unimproved real property that will, or is likely to, increase the rate or quantity of run-off or pollution from the site without first obtaining a permit from the City and following the conditions of the permit.**

**FINDING:**

The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site.

This criterion is met with conditions of approval PFR-5, PFR-16, and PFR-18.

**7. TMC 3-5-340 FACILITIES REQUIRED.**

**For new development, subject to the exemptions of TMC 3-5-310, no permit for construction, or land development, or plat or site plan shall be approved unless the conditions of the plat, plan or permit approval require permanent stormwater quality control facilities in accordance with this Title III.**

**FINDING:**

The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site.

Due to the existing conditions within the SW Herman Road right-of-way a stormwater quality control facility will not be constructed. Instead a fee in lieu of provision is authorized as requested. The fee-in-lieu will be per Clean Water Services Rates and Charges.

This criterion is met with conditions of approval PFR-5, PFR-6, PFR-16, and PFR-18.

**8. TMC 3-5-350 PHOSPHOROUS REMOVAL STANDARD.**

**The stormwater quality control facilities shall be designed to remove 65 percent of the phosphorous from the runoff from 100 percent of the newly constructed impervious surfaces. Impervious surfaces shall include pavement, buildings, public and private roadways, and all other surfaces with similar runoff characteristics.**

**FINDING:**

The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site.

This criterion is met with conditions of approval PFR-5, PFR-6, PFR-16, and PFR-18.

#### **9. TMC 3-5-360 DESIGN STORM.**

The stormwater quality control facilities shall be designed to meet the removal efficiency of [TMC 3-5-350](#) for a mean summertime storm event totaling 0.36 inches of precipitation falling in four hours with an average return period of 96 hours.

##### **FINDING:**

The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site.

This criterion is met with conditions of approval PFR-5, PFR-6, PFR-16, and PFR-18.

#### **1. TMC 3-5-370 DESIGN REQUIREMENTS.**

The removal efficiency in TDC Chapter 35 specifies only the design requirements and are not intended as a basis for performance evaluation or compliance determination of the stormwater quality control facility installed or constructed pursuant to this Title III.

##### **FINDING:**

The proposed water quality facility is specified and sized to meet these standards. Please refer to the Stormwater Report included in this application.

This criterion is met with conditions of approval PFR-5, PFR-6, PFR-16, and PFR-18.

#### **2. TMC 3-5-390 FACILITY PERMIT APPROVAL.**

A stormwater quality control facility permit shall be approved only if the following are met:

- (1) The plat, site plan, or permit application includes plans and a certification prepared by an Oregon registered, professional engineer that the proposed stormwater quality control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorous required by this Title III. Clean Water Services Design and Construction Standards shall be used in preparing the plan for the water quality facility; and**
- (2) The plat, site plan, or permit application shall be consistent with the areas used to determine the removal required in TMC 3-5-350; and**
- (3) A financial assurance, or equivalent security acceptable to the City, is provided by the applicant which assures that the stormwater quality control facilities are constructed according to the plans established in the plat, site**

**plan, or permit approval. The financial assurance may be combined with our financial assurance requirements imposed by the City; and**  
**(4) A stormwater facility agreement identifies who will be responsible for assuring the long term compliance with the operation and maintenance plan.**

**FINDING:**

The applicant will obtain a permit from the City of Tualatin to install an approved runoff flow control and treatment facility on the subject site.

Due to the existing conditions within the SW Herman Road right-of-way a stormwater quality control facility will not be constructed. Instead a fee in lieu of provision is authorized as requested. The fee-in-lieu will be per Clean Water Services Rates and Charges.

This criterion is met with conditions of approval PFR-5, PFR-6, PFR-16, and PFR-18.

**B. CHAPTER 04-01: BUILDING CODES**

**I. TMC 4-1-030 GRADING**

**A person seeking a grading permit must submit a soil report with the permit application. The soils report submitted must be signed and sealed by an Oregon-certified soils engineer and comply with Appendix J of the Oregon Structural Specialty Code, 2014 edition. No grading activities may occur unless and until a person receives a grading permit and complies with this section.**

**FINDING:**

A signed and sealed Geotechnical report will be submitted to the City of Tualatin as required.

This criterion is met.

**C. TDC CHAPTER 70 - FLOOD PLAIN DISTRICT**

**I. TDC 70.110 DEVELOPMENT PERMIT REQUIRED**

**A development permit shall be obtained before construction or development begins within any area of special flood hazard established by TDC 70.050. The permit shall be for all structures, including manufactured homes, as set forth in the "Definitions," and for all other development, including fill and other activities, also as set forth in the "Definitions."**

**FINDING:**

A Development permit will be obtained prior to the start of any construction or on-site grading.

This criterion is satisfied with conditions of approval PFR-7.

## **II. TDC 70.120 APPLICATION FOR DEVELOPMENT PERMIT**

**Application for a development permit shall be made on forms furnished by the City Engineer and may include, but not be limited to, plans in duplicate, drawn to scale, showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:**

- (1) Elevation, in relation to mean sea level, of the lowest floor (including basement) of all structures;**
- (2) Elevation, in relation to mean sea level, to which any structure has been flood proofed;**
- (3) Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in TDC 70.180; and**
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.**

### **FINDING:**

A Grading Plan, Utility Plan and Stormwater Report are all included in this submittal. These items address the existence of a single, existing catch basin with an elevation below the 500 year flood plain. This catch basin is located within the parking lot and beneath the proposed building expansion area. The catch basin and associated piping will be disconnected from the existing storm system. New piping will be provided to collect, detain and treat run off from the roof of the building expansion and all reconfigured impervious parking, loading and maneuvering areas. The building is not displacing 100 year flood plain detention. There is also an area of the site at the NE corner which is within the 100 year flood plain, however this building expansion will not impact this area in any way. These plans have been prepared by a certified professional engineer.

This criterion is satisfied with conditions of approval PFR-7**Error! Reference source not found..**

## **III. TDC 70.170 GENERAL STANDARDS**

**In all areas of special flood hazards, the following standards are required:**

- (5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (TDC 70.140(2)), applications for buildings permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.**

### **FINDING:**

Per the submitted Flood Plain Memorandum and plans, the finished floor elevation for the proposed expansion (136.93) is not within the 500-year flood plain.

This criterion is satisfied with conditions of approval PFR-7.

#### **IV. TDC SECTION 70.180 SPECIFIC STANDARDS.**

In all areas of special flood hazards where base flood elevation data has been provided as set forth in TDC 70.050, "BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD," or TDC 70.140(2), "USE OF OTHER BASE FLOOD DATA," the following provisions are required:

##### **(2) Nonresidential Construction.**

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water.

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in TDC 70.140(3)(b).

(d) Elevated structures that are not floodproofed, but that have fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

(e) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

#### **FINDING:**

Per the submitted Flood Plain Memorandum and plans, the finished floor elevation for the proposed expansion (136.93) is well above the 500-year flood plain elevation (+/- four feet above).

This criterion is satisfied with conditions of approval PFR-7.

## **D. TDC CHAPTER 73: COMMUNITY DESIGN STANDARDS**

### **I. TDC SECTION 73.270 GRADING.**

**(1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.**

**FINDING:**

Grading which reduces runoff and provides surface drainage flow away from the building and sidewalks is proposed. All landscape top soil will be restored and amended.

This criterion is satisfied with conditions of approval PFR-3 and PFR-4.

**(2) All planting areas shall be graded to provide positive drainage.**

**FINDING:**

Proposed grading will not substantially change the general slope of the site. All planting areas have been designed to integrate the natural slope of the site and direct excess water away from the building and into the proposed stormwater network.

This criterion is satisfied with conditions of approval PFR-3 and PFR-4.

**(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.**

**FINDING:**

Proposed landscaping will be bounded by curbs or the paved on-site pedestrian network so as to ensure that landscape materials will not wash across roadways or walkways.

This criterion is satisfied with conditions of approval PFR-3 and PFR-4.

**(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.**

**FINDING:**

Storm sewer catch basins are proposed at strategic locations to capture and redirect surface drainage from parking areas.

This criterion is satisfied with conditions of approval PFR-3 and PFR-4.

### **II. TDC SECTION 73.400 ACCESS.**

**(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are**

**continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.**

**FINDINGS:**

The 36-foot wide access and egress to this site is via SW 125th Court.

This criterion is met.

**(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets.**

**FINDINGS:**

The access and egress to this site is via SW 125th Court which is a public street.

This criterion is met.

**(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.**

**FINDINGS:**

A sidewalk currently exists along the SW 125th Ct. frontage, with a pedestrian connection proposed between the right-of-way and the north side of the building expansion entrance and parking area. The SW 125<sup>th</sup> Court sidewalk will be verified to be in good condition and meet Public Works Construction Code/ADA/PROWAG standards or improved.

Sidewalk will be construction adjacent to SW Herman Road that will be allowed to meander as needed to avoid poles and retain trees.

This criterion is met with conditions of approval PFR-9, PFR-10, PFR-11, PFR-16, and PFR-18.

**(12) Minimum Access Requirements for Industrial Uses.**

**Ingress and egress for industrial uses shall not be less than the following::**

| Required Parking Spaces | Minimum Number Required | Minimum Pavement Width                             | Minimum Pavement Walkways, Etc. |
|-------------------------|-------------------------|--|---------------------------------|
| 1-250                   | 1                       | 36 feet for first 50 feet from ROW, 24' thereafter | No curbs or walkway required    |

**FINDINGS:**

This project requires a minimum of one access/egress driveway that is a minimum of 36-feet in width for the first 50-feet from right-of-way. This project proposes redevelopment of the existing northern-most driveway. As proposed, the pavement width is 36-feet, for the first 50-feet from the SW 125th Court right-of-way, into the site.

This criterion is satisfied with conditions of approval **Error! Reference source not found.**

**(14) Maximum Driveway Widths and Other Requirements.**

**(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.**

**FINDINGS:**

The proposed driveway is 36 feet wide, less than the maximum.

This criterion is satisfied with conditions of approval **Error! Reference source not found.**

**(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.**

**FINDINGS:**

The proposed driveway is approximately 305 feet away from the existing one to the south, greater than the minimum of 40 feet.

This criterion is satisfied with conditions of approval **Error! Reference source not found.**

**(15) Distance between Driveways and Intersections**

**Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.**



**(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.**

**FINDINGS:**

SW Herman Road is an arterial road. The project currently has two existing driveways off of SW 125th Ct. Both will be retained and the northern-most driveway will be rebuilt to provide access to the building expansion area. This driveway access is approximately 410-feet from the intersection of SW Herman Road and SW 125th Ct.

This criterion is satisfied with conditions of approval **Error! Reference source not found.**

**(16) Vision Clearance Area.**

**(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).**

**(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).**

**(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).**

**FINDINGS:**

The project currently has two existing driveways. Both will be retained and the northern-most driveway will be rebuilt to provide access to the building expansion. Vision clearance for both driveways, comply with the required distances and vertical height restrictions. Specifically, the traffic report notes that the site access sight distance at the existing northern most driveway off of SW 125th Ct. is 270-feet to the north and 410-feet to the south, both exceed the minimum requirement.

This criterion is satisfied.

## **E. TDC CHAPTER 74: PUBLIC IMPROVEMENT REQUIREMENTS**

### **I. TDC SECTION 74.120 PUBLIC IMPROVEMENTS.**

**(1) Except as specially provided, all public improvements shall be installed at the expense of the applicant. All public improvements installed by the applicant shall be constructed and guaranteed as to workmanship and material as required by the Public Works Construction Code prior to acceptance by the City. No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.**

#### **FINDINGS:**

Any public improvements completed as a result of the AR process shall be installed at expense of applicant.

This criterion is satisfied with conditions of approval PFR-16 and PFR-18.

### **II. TDC SECTION 74.130 PRIVATE IMPROVEMENTS.**

**All private improvements shall be in-stalled at the expense of the applicant. The property owner shall retain maintenance responsibilities over all private improvements.**

#### **FINDINGS:**

All private improvements to be installed at expense of the applicant

This criterion is satisfied with conditions of approval PFR-16 and PFR-18.

### **III. TDC SECTION 74.140 CONSTRUCTION TIMING.**

**(1) All the public improvements required under this chapter shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy; or, for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.**

**(2) All private improvements required under this chapter shall be approved by the City prior to the issuance of a Certificate of Occupancy; or for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.**

#### **FINDINGS:**

All improvements will be completed prior to issuance of Certificate of Occupancy.

This criterion is satisfied with conditions of approval PFR-18.

#### **IV. TDC SECTION 74.210 MINIMUM STREET RIGHT-OF-WAY WIDTHS.**

The width of streets in feet shall not be less than the width required to accommodate a street improvement needed to mitigate the impact of a proposed development. In cases where a street is required to be improved according to the standards of the TDC, the width of the right-of-way shall not be less than the minimums indicated in TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G.

##### **FINDINGS:**

This project will dedicate to SW Herman Road right-of-way to total 62.5 feet from Southern Pacific Railroad right-of-way. This width meets the cross-section similar to the east. The existing cross-section of SW 125<sup>th</sup> Court is similar to the remainder of the street and will not require to update to current code's cross-section.

This criterion is satisfied with conditions of approval PFR-19.

**(2) For development applications other than subdivisions and partitions, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way width, the additional right-of-way necessary to comply with TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G of the Tualatin Community Plan shall be dedicated to the City for use by the public prior to issuance of any building permit for the proposed development. This right-of-way dedication shall be for the full width of the property abutting the roadway and, if required by the City Engineer, additional dedications shall be provided for slope and utility easements if deemed necessary.**

##### **FINDINGS:**

This project will dedicate to SW Herman Road right-of-way to total 62.5 feet from Southern Pacific Railroad right-of-way. This width meets the cross-section similar to the east.

This criterion is satisfied with conditions of approval PFR-19.

#### **V. TDC SECTION 74.320 SLOPE EASEMENTS**

**(1) The applicant shall obtain and convey to the City any slope easements determined by the City Engineer to be necessary adjacent to the proposed development site to support the street improvements in the public right-of-way or accessway or utility improvements required to be constructed by the applicant.**

**(3) For all other development applications, a slope easement dedication shall be submitted to the City Engineer; building permits shall not be issued for the development prior to acceptance of the easement by the City.**

##### **FINDINGS:**

A slope easement for future construction of improvement will be granted, as needed and upon request. A slope easement may be needed to assure the location of SW Herman Road sidewalk.

This criterion is satisfied with conditions of approval PFR-21.

#### **VI. TDC SECTION 74.330 UTILITY EASEMENTS.**

- (1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.**
- (4) For development applications other than subdivisions and partitions, and for both on-site and off-site easement areas, a utility easement shall be granted to the City; building permits shall not be issued for the development prior to acceptance of the easement by the City. The City may elect to exercise eminent domain and condemn necessary off-site public utility easements at the applicant's request and expense. The City Council shall determine when condemnation proceedings are to be used.**
- (5) The width of the public utility easement shall meet the requirements of the Public Works Construction Code. All subdivisions and partitions shall have a 6-foot public utility easement adjacent to the street and a 5-foot public utility easement adjacent to all side and rear lot lines.**

#### **FINDINGS:**

The public utility easements are needed to allow routing of franchise utilities. These are needed adjacent to right-of-way. A 6-foot wide public utility easement will be recorded for both SW Herman Road and SW 125<sup>th</sup> Court.

This criterion is satisfied with conditions of approval PFR-21.

#### **VII. TDC SECTION 74.420 STREET IMPROVEMENTS.**

**When an applicant proposes to develop land adjacent to an existing or proposed street, including land which has been excluded under TDC 74.220, the applicant should be responsible for the improvements to the adjacent existing or proposed street that will bring the improvement of the street into conformance with the Transportation Plan (TDC Chapter 11), TDC 74.425 (Street Design Standards), and the City's Public Works Construction Code, subject to the following provisions:**

- (1) For any development proposed within the City, roadway facilities within the right-of-way described in TDC 74.210 shall be improved to standards as set out in the Public Works Construction Code.**

#### **FINDINGS:**

The existing sidewalks for SW 125<sup>th</sup> Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

The applicant will prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-8, PFR-9, PFR-10, PFR-16, and PFR-18.

**(2) The required improvements may include the rebuilding or the reconstruction of any existing facilities located within the right-of-way adjacent to the proposed development to bring the facilities into compliance with the Public Works Construction Code.**

**FINDINGS:**

The existing sidewalks for SW 125th Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

The applicant will prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-8, PFR-9, PFR-10, PFR-16, and PFR-18.

**(3) The required improvements may include the construction or rebuilding of off-site improvements which are identified to mitigate the impact of the development.**

**FINDINGS:**

No off-site improvements are expected to be required to due impacts of the proposed development.

A transportation impact study was prepared by SABA, C.E.S. which evaluated potential impacts on nearby transportation facilities which are determined to operation acceptably. No significant trends or crash patterns were identified at any of the study intersections.

Proposed mitigation includes no parking on either side of the north driveway and the north side of the south driveway for 20 feet plus no parking south of the south driveway

all the way to SW Herman Road and adding a stop bar at the existing stop sign on SW 125<sup>th</sup> Court and SW Herman Road.

This criterion is satisfied.

Note: The request for approval of no parking is a separate City Council determination and not a part of this land use decision.

**(4) Where development abuts an existing street, the improvement required shall apply only to that portion of the street right-of-way located between the property line of the parcel proposed for development and the centerline of the right-of-way, plus any additional pavement beyond the centerline deemed necessary by the City Engineer to ensure a smooth transition between a new improvement and the existing roadway (half-street improvement). Additional right-of-way and street improvements and off-site right-of-way and street improvements may be required by the City to mitigate the impact of the development. The new pavement shall connect to the existing pavement at the ends of the section being improved by tapering in accordance with the Public Works Construction Code.**

**FINDINGS:**

This project proposes the reconstruction of the existing north driveway. This driveway will be brought up to applicable code standards.

The existing sidewalks for SW 125<sup>th</sup> Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

The applicant will prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-8, PFR-9, PFR-10, PFR-16, and PFR-18.

**(6) All required street improvements shall include curbs, sidewalks with appropriate buffering, storm drainage, street lights, street signs, street trees, and, where designated, bikeways and transit facilities.**

**FINDINGS:**

The existing sidewalks for SW 125<sup>th</sup> Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

The applicant will prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-8, PFR-9, PFR-10, PFR-16, and PFR-18.

**(8) For development applications other than subdivisions and partitions, all street improvements required by this section shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy.**

**FINDINGS:**

All private and public improvements shown on submitted plans and corrected by conditions of approval will be completed prior to the issuance of a Certificate of Occupancy.

This criterion is with conditions of approval PFR-18.

**(11) Existing streets which abut the proposed development site shall be graded, constructed, reconstructed, surfaced or repaired as necessary in accordance with the Public Works Construction Code and TDC Chapter 11, Transportation Plan, and TDC 74.425 (Street Design Standards).**

**FINDINGS:**

The existing sidewalks for SW 125th Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

The applicant will prove that any existing street light illumination is adequate or construct street lights in accordance with Public Works Construction Code.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-8, PFR-9, PFR-10, PFR-16, and PFR-18.

**(12) Sidewalks with appropriate buffering shall be constructed along both sides of each internal street and at a minimum along the development side of each external street in accordance with the Public Works Construction Code.**

**FINDINGS:**

The existing sidewalks for SW 125th Court will be proven to be in conformance with Public Works Construction Code/ADA/PROWAG or the sections that are not will be reconstructed.

SW Herman Road will be constructed to meet the typical cross-section to the east which includes 6-foot bike lane, curb and gutter, a 6-foot sidewalk which is allowed to meander around existing poles and to save trees, and variable planter strip with street trees and street lights.

This criterion is with conditions of approval PFR-9, PFR-10, PFR-16, and PFR-18.

**(17) Intersections should be improved to operate at a level of service of at least D and E for signalized and unsignalized intersections, respectively.**

**FINDINGS:**

No off-site improvements are expected to be required to due impacts of the proposed development.

A transportation impact study was prepared by SABA, C.E.S. which evaluated potential impacts on nearby transportation facilities which are determined to operation acceptably. No significant trends or crash patterns were identified at any of the study intersections.

This criterion is satisfied.

**VIII. TDC SECTION 74.425 STREET DESIGN STANDARDS.**

**(1) Street design standards are based on the functional and operational characteristics of streets such as travel volume, capacity, operating speed, and safety. They are necessary to ensure that the system of streets, as it develops, will be capable of safely and efficiently serving the traveling public while also accommodating the orderly development of adjacent lands.**

**(2) The proposed street design standards are shown in Figures 72A through 72G. The typical roadway cross sections comprise the following elements: right-of-way, number of travel lanes, bicycle and pedestrian facilities, and other amenities such as landscape strips. These figures are intended for planning purposes for new road construction, as well as for those locations where it is physically and economically feasible to improve existing streets**

**(4) All streets shall be designed and constructed according to the preferred standard. The City Engineer may reduce the requirements of the preferred standard based on specific site conditions, but in no event will the requirement be less than the minimum standard. The City Engineer shall take into consideration the following factors when deciding whether the site conditions warrant a reduction of the preferred standard:**

**(a) Arterials:**

**(i) Whether adequate right-of-way exists**

**(ii) Impacts to properties adjacent to right-of-way**



- (iii) Current and future vehicle traffic at the location
- (iv) Amount of heavy vehicles (buses and trucks).

**(b) Collectors:**

- (i) Whether adequate right-of-way exists
- (ii) Impacts to properties adjacent to right-of-way
- (iii) Amount of heavy vehicles (buses and trucks)
- (iv) Proximity to property zoned manufacturing or industrial.

**(c) Local Streets:**

(i) Local streets proposed within areas which have environmental constraints and/or sensitive areas and will not have direct residential access may utilize the minimum design standard. When the minimum design standard is allowed, the City Engineer may determine that no parking signs are required on one or both sides of the street.

**FINDINGS:**

This project will dedicate to SW Herman Road right-of-way to total 62.5 feet from Southern Pacific Railroad right-of-way. This width meets the cross-section similar to the east. The existing cross-section of SW 125th Court is similar to the remainder of the street and will not be required to update to current code's cross-section.

This criterion is with conditions of approval PFR-9, PFR-10, PFR-16, and PFR-18.

**IX. TDC SECTION 74.430 MODIFICATIONS OF REQUIREMENTS IN CASES OF UNUSUAL CONDITIONS.**

- (1) When, in the opinion of the City Engineer, the construction of street improvements in accordance with TDC 74.420 would result in the creation of a hazard, or would be impractical, or would be detrimental to the City, the City Engineer may modify the scope of the required improvement to eliminate such hazardous, impractical, or detrimental results. Examples of conditions requiring modifications to improvement requirements include but are not limited to horizontal alignment, vertical alignment, significant stands of trees, fish and wildlife habitat areas, the amount of traffic generated by the proposed development, timing of the development or other conditions creating hazards for pedestrian, bicycle or motor vehicle traffic. The City Engineer may determine that, although an improvement may be impractical at the time of development, it will be necessary at some future date. In such cases, a written agreement guaranteeing future performance by the applicant in installing the required improvements must be signed by the applicant and approved by the City.
- (2) When the City Engineer determines that modification of the street improvement requirements in TDC 74.420 is warranted pursuant to subsection (1) of this section, the City Engineer shall prepare written findings of modification. The City Engineer shall forward a copy of said findings and description of modification to the applicant, or his authorized agent, as part of the Utility Facilities Review for the proposed development, as provided by TDC 31.072. The decision of the City Engineer may be appealed to the City Council in accordance with TDC 31.076 and 31.077.

**(3) To accommodate bicyclists on streets prior to those streets being upgraded to the full standards, an interim standard may be implemented by the City. These interim standards include reduction in motor vehicle lane width to 10 feet [the minimum specified in AASHTO's A Policy on Geo-metric Design of Highways and Streets (1990)], a reduction of bike lane width to 4-feet (as measured from the longitudinal gutter joint to the centerline of the bike lane stripe), and a paint-stripped separation 2 to 4 feet wide in lieu of a center turn lane. Where available roadway width does not provide for these minimums, the roadway can be signed for shared use by bicycle and motor vehicle travel. When width constraints occur at an intersection, bike lanes should terminate 50 feet from the intersection with appropriate signing.**

**FINDINGS:**

This project will dedicate to SW Herman Road right-of-way to total 62.5 feet from Southern Pacific Railroad right-of-way. This width meets the cross-section similar to the east which doesn't include a sidewalk or planter strip on the opposing side due to the railroad tracks. The existing cross-section of SW 125th Court is similar to the remainder of the street and will not be required to update to current code's cross-section.

This criterion is with conditions of approval PFR-10, PFR-11, PFR-17, and PFR-21.

**X. TDC 74.440 STREETS, TRAFFIC STUDY REQUIRED**

- (1) The City Engineer may require a traffic study to be provided by the applicant and furnished to the City as part of the development approval process as provided by this Code, when the City Engineer determines that such a study is necessary in connection with a proposed development project in order to:**
- (a) Assure that the existing or proposed transportation facilities in the vicinity of the proposed development are capable of accommodating the amount of traffic that is expected to be generated by the proposed development, and/or**
  - (b) Assure that the internal traffic circulation of the proposed development will not result in conflicts between on-site parking movements and/or on-site loading movements and/or on-site traffic movements, or impact traffic on the adjacent streets.**

**FINDINGS:**

A traffic study prepared by SABA, C.E.S. identified the site has about 530 feet of frontage on the west side of SW 125th Court, with two separate driveways about 110 and 410 feet from the SW Herman Road / SW 125th Ct. T-intersection. Both driveways will remain. The northern-most driveway will be modified per this project proposal. There are no access drives along SW Herman Road.

No off-site improvements are expected to be required to due impacts of the proposed development.

The transportation impact study prepared by SABA, C.E.S. evaluated potential impacts on nearby transportation facilities which were determined to operation acceptably. No significant trends or crash patterns were identified at any of the study intersections.

Proposed mitigation includes no parking on either side of the north driveway and the north side of the south driveway for 20 feet plus no parking south of the south driveway all the way to SW Herman Road and adding a stop bar at the existing stop sign on SW 125<sup>th</sup> Court and SW Herman Road.

This criterion is satisfied.

Note: The request for approval of no parking is a separate City Council determination and not a part of this land use decision.

**(2) The required traffic study shall be completed prior to the approval of the development application.**

**FINDINGS:**

A traffic study prepared by SABA, C.E.S. and submitted with this architectural review.

This criterion is met.

**(3) The traffic study shall include, at a minimum:**

- (a) an analysis of the existing situation, including the level of service on adjacent and impacted facilities.**
- (b) an analysis of any existing safety deficiencies.**
- (c) proposed trip generation and distribution for the proposed development.**
- (d) projected levels of service on adjacent and impacted facilities.**
- (e) recommendation of necessary improvements to ensure an acceptable level of service for roadways and a level of service of at least D and E for signalized and unsignalized intersections respectively, after the future traffic impacts are considered.**
- (f) The City Engineer will determine which facilities are impacted and need to be included in the study.**
- (g) The study shall be conducted by a registered engineer.**

**FINDINGS:**

A traffic study prepared by SABA, C.E.S. identified the site has about 530 feet of frontage on the west side of SW 125<sup>th</sup> Court, with two separate driveways about 110 and 410 feet from the SW Herman Road / SW 125<sup>th</sup> Ct. T-intersection. Both driveways will remain. The northern-most driveway will be modified per this project proposal. There are no access drives along SW Herman Road.

No off-site improvements are expected to be required to due impacts of the proposed development.

The transportation impact study prepared by SABA, C.E.S. evaluated potential impacts on nearby transportation facilities which were determined to operation acceptably. No significant trends or crash patterns were identified at any of the study intersections.

Proposed mitigation includes no parking on either side of the north driveway and the north side of the south driveway for 20 feet plus no parking south of the south driveway all the way to SW Herman Road and adding a stop bar at the existing stop sign on SW 125<sup>th</sup> Court and SW Herman Road.

This criterion is satisfied.

Note: The request for approval of no parking is a separate City Council determination and not a part of this land use decision.

**(4) The applicant shall implement all or a portion of the improvements called for in the traffic study as determined by the City Engineer.**

**FINDINGS:**

No off-site improvements are expected to be required to due impacts of the proposed development.

The transportation impact study prepared by SABA, C.E.S. evaluated potential impacts on nearby transportation facilities which were determined to operation acceptably. No significant trends or crash patterns were identified at any of the study intersections.

Proposed mitigation includes no parking on either side of the north driveway and the north side of the south driveway for 20 feet plus no parking south of the south driveway all the way to SW Herman Road and adding a stop bar at the existing stop sign on SW 125<sup>th</sup> Court and SW Herman Road.

This criterion is satisfied.

Note: The request for approval of no parking is a separate City Council determination and not a part of this land use decision.

**XI. TDC SECTION 74.470 STREET LIGHTS.**

**(1) Street light poles and luminaries shall be installed in accordance with the Public Works Construction Code.**

**(2) The applicant shall submit a street lighting plan for all interior and exterior streets on the proposed development site prior to issuance of a Public Works Permit.**

**FINDINGS:**

No new street lighting is proposed at this time. This project is not proposing to install street lights as part of this application. Street illumination will be shown to adequate to

current Public Works Construction Code or street lights will be constructed to meet illumination standards.

This criterion is satisfied with conditions of approval PFR-8, PFR-16, and PFR-18.

## **XII. TDC SECTION 74.485 STREET TREES.**

**(2) In nonresidential subdivisions and partitions street trees shall be planted by the owners of the individual lots as development occurs.**

**(3) The Street Tree Ordinance specifies the species of tree which is to be planted and the spacing between trees.**

### **FINDINGS:**

There are existing trees along this site's frontage of SW 125<sup>th</sup> Court. These are not within right of way, but function similar due to a curb tight sidewalk. Requiring street trees behind the sidewalk within right-of-way would conflict with the survivability of the onsite trees.

SW Herman Road will have a meandering sidewalk with existing onsite trees that may have similar conflicts. The applicant will evaluate the final proposed street cross-section to determine if street trees are viable and install ones that are acceptable.

The species and spacing of proposed street trees will be in conformance with the Street Tree Ordinance.

This criterion is satisfied with conditions of approval PFR-10, PFR-16, and PFR-18.

## **XIII. TDC SECTION 74.610 WATER SERVICE.**

**(1) Water lines shall be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans shall be submitted to the City Engineer for review and approval prior to construction.**

### **FINDINGS:**

No public improvement to the water, Sanitary Sewer or Storm Drainage system is proposed.

This criterion is satisfied.

**(2) If there are undeveloped properties adjacent to the subject site, public water lines shall be extended by the applicant to the common boundary line of these properties. The lines shall be sized to provide service to future development, in accordance with the City's Water System Master Plan, TDC Chapter 12.**

### **FINDINGS:**

No public services will be extended to adjacent properties as they availability to public water and sanitary sewer lines plus public stormwater lines or wetlands.

This criterion is satisfied.

**(3) As set forth is TDC Chapter 12, Water Service, the City has three water service levels. All development applicants shall be required to connect the proposed development site to the service level in which the development site is located. If the development site is located on a boundary line between two service levels the applicant shall be required to connect to the service level with the higher reservoir elevation. The applicant may also be required to install or provide pressure reducing valves to supply appropriate water pressure to the properties in the proposed development site.**

**FINDINGS:**

The existing water lateral is connected to the appropriate service level for this location.

This criterion is satisfied.

**XIV. TDC SECTION 74.620 SANITARY SEWER SERVICE.**

**(1) Sanitary sewer lines shall be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.**

**FINDINGS:**

No public improvement to the water, Sanitary Sewer or Storm Drainage system is proposed.

This criterion is satisfied.

**(2) If there are undeveloped properties adjacent to the proposed development site which can be served by the gravity sewer system on the proposed development site, the applicant shall extend public sanitary sewer lines to the common boundary line with these properties. The lines shall be sized to convey flows to include all future development from all up stream areas that can be expected to drain through the lines on the site, in accordance with the City's Sanitary Sewer System Master Plan, TDC Chapter 13.**

**FINDINGS:**

No public services will be extended to adjacent properties as they availability to public water and sanitary sewer lines plus public stormwater lines or wetlands.

This criterion is satisfied.

**XV. TDC SECTION 74.630 STORM DRAINAGE SYSTEM.**

**(1) Storm drainage lines shall be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.**

**FINDINGS:**

No public improvement to the water, Sanitary Sewer or Storm Drainage system is proposed.

This project is proposing a storm drainage system that will collect, detain, and treat stormwater runoff prior to releasing to the existing lateral connecting to the public stormwater line in SW 125<sup>th</sup> Court. Preliminary stormwater calculations have been submitted that show the public stormwater system is adequate with their proposed detention. Final stormwater calculations will be submitted prior to issuance of permits.

This criterion is satisfied with conditions of approval PFR-5, PFR-13, PFR-16, and PFR-18.

**(2) The storm drainage calculations shall confirm that adequate capacity exists to serve the site. The discharge from the development shall be analyzed in accordance with the City's Storm and Surface Water Regulations.**

**FINDINGS:**

No public improvement to the water, Sanitary Sewer or Storm Drainage system is proposed.

This project is proposing a storm drainage system that will collect, detain, and treat stormwater runoff prior to releasing to the existing lateral connecting to the public stormwater line in SW 125<sup>th</sup> Court. Preliminary stormwater calculations have been submitted that show the public stormwater system is adequate with their proposed detention. Final stormwater calculations will be submitted prior to issuance of permits.

This criterion is satisfied with conditions of approval PFR-5, PFR-13, PFR-16, and PFR-18.

**(3) If there are undeveloped properties adjacent to the proposed development site which can be served by the storm drainage system on the proposed development site, the applicant shall extend storm drainage lines to the common boundary line with these properties. The lines shall be sized to convey expected flows to include all future development from all up stream areas that will drain through the lines on the site, in accordance with the Tualatin Drainage Plan in TDC Chapter 14.**

**FINDINGS:**

No public services will be extended to adjacent properties as they availability to public water and sanitary sewer lines plus public stormwater lines or wetlands.

This criterion is satisfied.

**XVI. TDC SECTION 74.640 GRADING.**

**(1) Development sites shall be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development.**

**FINDINGS:**

This construction of this building expansion will not cause any increase of soil erosion from the site or adversely impact adjacent properties.

The area disturbed is between 1 and 5 acres. The applicant shall obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

This criterion is satisfied with conditions of approval PFR-3, PFR-4, PFR-16, and PFR-18.

**(2) A development applicant shall submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Engineer may require the applicant to remove all excess material from the development site.**

**FINDINGS:**

This construction of this building expansion will not cause any increase of soil erosion from the site or adversely impact adjacent properties. All portions of the development will be served by gravity drainage.

The area disturbed is between 1 and 5 acres. The applicant shall obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of permits allowing construction activities.

This criterion is satisfied with conditions of approval PFR-3, PFR-4, PFR-16, and PFR-18.

**XVII. TDC SECTION 74.650 WATER QUALITY, STORM WATER DETENTION AND EROSION CONTROL.**

**The applicant shall comply with the water quality, storm water detention and erosion control requirements in the Surface Water Management Ordinance. If required:**

**(2) On all other development applications, prior to issuance of any building permit, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations**



**indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.**

**FINDINGS:**

As proposed, this building expansion project complies with all applicable codes and standards in compliance with Clean Water Services Resolution and Order 07-20. Specifically, flow control will meet existing rates and the proposed filter cartridges are approved by CWS for private development.

The applicant has submitted a Service Provider Letter from Clean Water Services indicating that Sensitive Areas do not exist on-site. A CWS Memorandum was received dated November 29, 2018 for development on this site. The applicant will submit plans that are sufficient to obtain a Stormwater Connection Permit Authorization Letter that complies with the submitted Service Provider Letter conditions, for review and approval.

This criterion is satisfied with conditions of approval PFR-5, PFR-12, PFR-16, and PFR-18.

**(3) For on-site private and regional non-residential public facilities, the applicant shall submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.**

**FINDINGS:**

A stormwater facility agreement that includes an operation and maintenance plan will be required.

An erosion control plan will be submitted prior to approval of a Public Works Permit. Stormwater and water quality for each building and associated impervious surface will be accommodated on-site.

The applicant will obtain a 1200CN Construction Erosion Control permit from Clean Water Services as agent for Oregon DEQ and obtain a grading and erosion control permit from the City of Tualatin prior to issuance of building permits.

This criterion is satisfied with conditions of approval PFR-5, PFR-12, PFR-16, and PFR-18.

**XVIII. TDC 74.660 UNDERGROUND**

**(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities shall be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground.**

**Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant shall make all necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers.**

**FINDINGS:**

SW Herman Road has overhead lines that are allowed to remain. SW 125<sup>th</sup> Court's utilities are underground.

This criterion is satisfied.

**(2) Any existing overhead utilities may not be upgraded to serve any proposed development. If existing overhead utilities are not adequate to serve the proposed development, the applicant shall, at their own expense, provide an underground system. The applicant shall be responsible for obtaining any off-site deeds and/or easements necessary to provide utility service to this site; the deeds and/or easements shall be submitted to the City Engineer for acceptance by the City prior to issuance of the Public Works Permit.**

**FINDINGS:**

No new overhead utility lines will be constructed.

This criterion is satisfied.

**XIX. TDC SECTION 74.670 EXISTING STRUCTURES.**

**(1) Any existing structures requested to be retained by the applicant on a proposed development site shall be connected to all available City utilities at the expense of the applicant.**

**FINDINGS:**

As this is an expansion of an existing development, all structures are to be retained. Utility expansions to serve the proposed building expansion will be placed underground.

This criterion is satisfied.

**(2) The applicant shall convert any existing overhead utilities serving existing structures to underground utilities, at the expense of the applicant.**

**FINDINGS:**

SW Herman Road has overhead lines that are allowed to remain. SW 125<sup>th</sup> Court's utilities are underground.

No new overhead utility lines will be constructed.

This criterion is satisfied.

**XX. TDC SECTION 74.720 PROTECTION OF TREES DURING CONSTRUCTION.**

**(1) During the erection, repair, alteration or removal of a building or structure, it is unlawful for the person in charge of such erection, repair, or alteration or to leave a tree in or upon a public right-of-way in the vicinity of the building or structure without a good and sufficient guard or protectors to prevent injury to the tree arising out of or by reason of such erection, repair, alteration or removal.**

**FINDINGS:**

Trees designated to be retained will be protected during construction as required by the Arborist Report and specified on the Landscape Plans.

This criterion is satisfied.

**(2) Excavations and driveways shall not be placed within six feet of a tree in or upon a public right-of-way without written permission from the City Engineer. During excavation or construction, the person shall guard the tree within six feet and all building material or other debris shall be kept at least four feet from any tree.**

**FINDINGS:**

An existing tree north of the north driveway will be removed due to reconstruction and the vicinity replanted. This is acceptable.

This criterion is satisfied.

**XXI. TDC SECTION 74.765 STREET TREE SPECIES AND PLANTING LOCATIONS.**

**All trees, plants or shrubs planted in the right-of-way of the City shall conform in species and location and in accordance with the street tree plan in Schedule A. If the Operations Director determines that none of the species in Schedule A is appropriate or finds appropriate a species not listed, the Director may substitute an unlisted species.**

**FINDINGS:**

There are existing trees along this site's frontage of SW 125<sup>th</sup> Court. These are not within right of way, but function similar due to a curb tight sidewalk. Requiring street trees behind the sidewalk within right-of-way would conflict with the survivability of the onsite trees.

SW Herman Road will have a meandering sidewalk with existing onsite trees that may have similar conflicts. The applicant will evaluate the final proposed street cross-section to determine if street trees are viable and install ones that are acceptable.

The species and spacing of proposed street trees will be in conformance with the Street Tree Ordinance.

This criterion is satisfied with conditions of approval PFR-10, PFR-16, and PFR-18.